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either water sprays in the barking drums or in a partial submersion of the drums in a “tub” of water.

(s) TCDD. 2,3,7,8-tetrachlorodibenzo-*p*-dioxin. The approved method of analysis for TCDD is Method 1613B, which is available in Appendix A of this part, and online at <http://water.epa.gov/scitech/methods/cwa/index.cfm>.

(t) TCDF. 2,3,7,8-tetrachlorodibenzofuran. The approved method of analysis for TCDF is Method 1613B, which is available in Appendix A of this part, and online at <http://water.epa.gov/scitech/methods/cwa/index.cfm>.

(u) *Chloroform*. The approved methods of analysis for chloroform are listed in Table IC at 40 CFR 136.3.

(v) The approved method of analysis for the following chlorinated phenolic compounds is Method 1653, which is available in Appendix A of this part, and online at <http://water.epa.gov/scitech/methods/cwa/index.cfm>:

- (1) Trichlorosyringol.
- (2) 3,4,5-Trichlorocatechol.
- (3) 3,4,6-Trichlorocatechol.
- (4) 3,4,5-Trichloroguaiacol.
- (5) 3,4,6-Trichloroguaiacol.

- (6) 4,5,6-Trichloroguaiacol.
- (7) 2,4,5-Trichlorophenol.
- (8) 2,4,6-Trichlorophenol.
- (9) Tetrachlorocatechol.
- (10) Tetrachloroguaiacol.
- (11) 2,3,4,6-Tetrachlorophenol.
- (12) Pentachlorophenol.

[63 FR 18635, Apr. 15, 1998; 63 FR 42239, Aug. 7, 1998, as amended at 29834, May 18, 2012]

### § 430.02 Monitoring requirements.

This section establishes minimum monitoring frequencies for certain pollutants. Where no monitoring frequency is specified in this section or where the duration of the minimum monitoring frequency has expired under paragraphs (b) through (e) of this section, the permit writer or pretreatment control authority shall determine the appropriate monitoring frequency in accordance with 40 CFR 122.44(i) or 40 CFR part 403, as applicable.

(a) *BAT, NSPS, PSES, and PSNS monitoring frequency for chlorinated organic pollutants*. The following monitoring frequencies apply to discharges subject to subpart B or subpart E of this part:

CAS number	Pollutant	Minimum monitoring frequency	
		Non-TCF <sup>a</sup>	TCF <sup>b</sup>
1198556	Tetrachlorocatechol	Monthly	(c)
2539175	Tetrachloroguaiacol	Monthly	(c)
2539266	Trichlorosyringol	Monthly	(c)
2668248	4,5,6-trichloroguaiacol	Monthly	(c)
32139723	3,4,6-trichlorocatechol	Monthly	(c)
56961207	3,4,5-trichlorocatechol	Monthly	(c)
57057837	3,4,5-trichloroguaiacol	Monthly	(c)
58902	2,3,4,6-tetrachlorophenol	Monthly	(c)
60712449	3,4,6-trichloroguaiacol	Monthly	(c)
87865	Pentachlorophenol <sup>d</sup>	Monthly	(c)
88062	2,4,6-trichlorophenol <sup>d</sup>	Monthly	(c)
95954	2,4,5-trichlorophenol <sup>d</sup>	Monthly	(c)
1746016	2,3,7,8-TCDD	Monthly	(c)
51207319	2,3,7,8-TCDF	Monthly	(c)
67663	chloroform <sup>e</sup>	Weekly	(c)
59473040	AOX <sup>f</sup>	Daily	None specified.

<sup>a</sup> Non-TCF: Pertains to any fiber line that does not use exclusively TCF bleaching processes.

<sup>b</sup> TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22 or, for indirect dischargers, as reported to the pretreatment control authority under 40 CFR 403.12 (b), (d), or (e).

<sup>c</sup> This regulation does not specify a limit for this pollutant for TCF bleaching processes.

<sup>d</sup> Monitoring frequency does not apply to this compound when used as a biocide. The permitting or pretreatment control authority must determine the appropriate monitoring frequency for this compound, when used as a biocide, under 40 CFR 122.44(i) or 40 CFR part 403, as applicable.

<sup>e</sup> This regulation does not specify a limit for this pollutant for subpart E mills.

<sup>f</sup> This regulation does not specify a limit for this pollutant for the ammonium-based or specialty grade sulfite pulp segments of subpart E.

(b) *Duration of required monitoring for BAT, NSPS, PSES, and PSNS*. The monitoring frequencies specified in para-

graph (a) of this section apply for the following time periods:

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(1) For direct dischargers, a duration of 5 years commencing on the date the applicable limitations or standards from subpart B or subpart E of this part are first included in the discharger's NPDES permit;

(2) For existing indirect dischargers, until April 17, 2006;

(3) For new indirect dischargers, a duration of 5 years commencing on the date the indirect discharger commences operation.

(c) *Reduced monitoring frequencies for bleach plant pollutants under the Voluntary Advanced Technology Incentives Program.* The following monitoring frequencies apply to mills enrolled in the Voluntary Advanced Technology Incentives Program established under subpart B of this part for a duration of 5 years commencing after achievement of the applicable BAT limitations specified in § 430.24(b)(3) or NSPS specified in § 430.25(c)(1) for the following pollutants, except as noted in footnote f:

CAS number	Pollutant	Minimum monitoring frequency		
		Non-ECF <sup>a</sup>	Advanced ECF <sup>b,f</sup>	TCF <sup>c</sup>
1198556 .....	Tetrachlorocatechol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
2539175 .....	Tetrachloroguaiacol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
2539266 .....	Trichlorosyringol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
2668248 .....	4,5,6-trichloroguaiacol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
32139723 .....	3,4,6-trichlorocatechol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
56961207 .....	3,4,5-trichlorocatechol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
57057837 .....	3,4,5-trichloroguaiacol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
58902 .....	2,3,4,6-tetrachlorophenol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
60712449 .....	3,4,6-trichloroguaiacol .....	Monthly .....	Monthly .....	( <sup>d</sup> )
87865 .....	Pentachlorophenol <sup>e</sup> .....	Monthly .....	Monthly .....	( <sup>d</sup> )
88062 .....	2,4,6-trichlorophenol <sup>e</sup> .....	Monthly .....	Monthly .....	( <sup>d</sup> )
95954 .....	2,4,5-trichlorophenol <sup>e</sup> .....	Monthly .....	Monthly .....	( <sup>d</sup> )
1746016 .....	2,3,7,8-TCDD .....	Monthly .....	Monthly .....	( <sup>d</sup> )
51207319 .....	2,3,7,8-TCDF .....	Monthly .....	Monthly .....	( <sup>d</sup> )
67663 .....	Chloroform .....	Weekly .....	Monthly .....	( <sup>d</sup> )

<sup>a</sup> Non-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.

<sup>b</sup> Advanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes, or exclusively ECF and TCF bleaching processes as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).

<sup>c</sup> TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.

<sup>d</sup> This regulation does not specify a limit for this pollutant for TCF bleaching processes.

<sup>e</sup> Monitoring frequency does not apply to this compound when used as a biocide. The permitting authority must determine the appropriate monitoring frequency for this compound, when used as a biocide, under 40 CFR 122.44(i).

<sup>f</sup> Monitoring requirements for these pollutants by mills certifying as Advanced ECF in their NPDES permit application or other communication to the permitting authority will be suspended after one year of monitoring. The permitting authority must determine the appropriate monitoring frequency for these pollutants beyond that time under 40 CFR 122.44(i).

(d) *Reduced monitoring frequencies for AOX under the Voluntary Advanced Technology Incentives Program (year one).* The following monitoring frequencies apply to direct dischargers enrolled in the Voluntary Advanced

Technology Incentives Program established under subpart B of this part for a duration of one year after achievement of the applicable BAT limitations specified in § 430.24(b)(4)(i) or NSPS specified in § 430.25(c)(2):

CAS number	Pollutant	Non-ECF, any tier <sup>a</sup>	Advanced ECF, any tier <sup>b</sup>	TCF, any tier <sup>c</sup>
59473040 .....	AOX .....	Daily .....	Weekly .....	None specified.

<sup>a</sup> Non-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.

<sup>b</sup> Advanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes or exclusively ECF and TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).

<sup>c</sup> TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.

(e) *Reduced monitoring frequencies for AOX under the Voluntary Advanced*

*Technology Incentives Program (years*

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*two through five*). The following monitoring frequencies apply to mills enrolled in the Voluntary Advanced Technology Incentives Program established under subpart B of this part for

a duration of four years starting one year after achievement of the applicable BAT limitations specified in § 430.24(b)(4)(i) or NSPS specified in § 430.25(c)(2):

CAS number	Pollutant	Non-ECF any tier <sup>a</sup>	Advanced ECF—tier I <sup>b</sup>	Advanced ECF—tier II <sup>b</sup>	Advanced ECF—tier III <sup>b</sup>	TCF— any tier <sup>c</sup>
59473040 ....	AOX .....	Daily .....	Monthly .....	Quarterly .....	Annually .....	None specified.

<sup>a</sup>Non-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.

<sup>b</sup>Advanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes or exclusively ECF and TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).

<sup>c</sup>TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.

(f) *Certification in Lieu of Monitoring for Chloroform*—(1) *Under what circumstances may a discharger be exempt from the minimum monitoring requirements of this section for chloroform?* A discharger subject to limitations or standards for chloroform under subpart B of this part is not subject to the minimum monitoring requirements specified in this section for chloroform at a fiber line to which the limitations or standards apply if the discharger meets the requirements of this section.

(2) *How do I qualify for the exemption?* At the time you request an exemption from the minimum monitoring requirements of this section for chloroform from your permitting authority or pretreatment control authority for a fiber line, you must:

(i) Demonstrate, based on 104 measurements taken over a period of not less than two years of monitoring conducted in accordance with paragraph (a) of this section, that you are complying with the applicable limitations or standards for chloroform;

(ii) Certify that you will maintain a record of the maximum value for each of the following process and operating conditions for the fiber line that was recorded during the collection of each of the samples used to make the demonstration required under paragraph (f)(2)(i) of this section.

(A) The pH of the first chlorine dioxide bleaching stage;

(B) The chlorine (Cl<sub>2</sub>) content of chlorine dioxide (ClO<sub>2</sub>) used on the bleach line;

(C) The kappa factor of the first chlorine dioxide bleaching stage; and

(D) The total bleach line chlorine dioxide application rate;

(iii) Identify the chlorine-containing compound used for bleaching during the collection of samples used to make the demonstration required under paragraph (f)(2)(i) of this section; and

(iv) Certify that the fiber line does not use either elemental chlorine or hypochlorite as bleaching agents.

(3) *What happens if I change the process and operating conditions on the fiber line so that one or more exceeds the maximum value recorded under paragraph (f)(2)(ii) of this section for that process and operating condition?* If you wish to continue your exemption from the minimum monitoring requirements of this section for chloroform, you must:

(i) Demonstrate, based on monitoring conducted at a frequency similar to that required in paragraph (a) of this section and for a duration determined by the permitting or pretreatment control authority, that you are complying with the applicable limitations or standards for chloroform;

(ii) Certify that you will maintain a record of the maximum value for each of the following process and operating conditions for the fiber line that was recorded during the collection of each of the samples used to make the demonstration required under paragraph (f)(6)(i) of this section:

(A) The pH of the first chlorine dioxide bleaching stage;

(B) The chlorine (Cl<sub>2</sub>) content of chlorine dioxide (ClO<sub>2</sub>) used on the bleach line;

(C) The kappa factor of the first chlorine dioxide bleaching stage; and

(D) The total bleach line chlorine dioxide application rate;

(iii) Identify the chlorine-containing compound used for bleaching during the collection of each sample used to make the demonstration required under paragraph (f)(3)(i) of this section; and

(iv) Certify that the fiber line does not use either elemental chlorine or hypochlorite as bleaching agents.

(4) *What are my reporting obligations?* You must certify in reports required under § 122.41(l)(4) or § 403.12(b) of this chapter, as appropriate, that the chlorine-containing compounds used for bleaching are unchanged from those identified under paragraph (f)(2)(iii) of this section and that the following process and operating conditions maintained on the fiber line during the reporting period have not exceeded the maximum value recorded for each such condition during the collection of the samples used to make the demonstration required under paragraphs (f)(2)(i) or (f)(3)(i) of this section:

(i) The pH of the first chlorine dioxide bleaching stage;

(ii) The chlorine ( $\text{Cl}_2$ ) content of chlorine dioxide ( $\text{ClO}_2$ ) used on the bleach line;

(iii) The kappa factor of the first chlorine dioxide bleaching stage; and

(iv) The total bleach line chlorine dioxide application rate.

(5) *What happens if I fail to maintain the records described in paragraphs (f)(2)(ii) and (f)(3)(ii) of this section?* You will be required to comply with the minimum monitoring requirements of this section for chloroform.

(6) *What happens if I exceed the maximum value recorded under paragraphs (f)(2)(ii) or (f)(3)(ii) of this section for any of the process and operating conditions identified in that section?*

(i) If for any reason (e.g., intentionally or due to process upset) you fail to maintain process and operating conditions at values equal to or less than the maximum value recorded under paragraphs (f)(2)(ii) or (f)(3)(ii) of this section for each such condition, you will be in violation of the applicable chloroform limitation or standard unless:

(A) Within 30 days, you notify your permitting or pretreatment control au-

thority in writing of the exceedance; and

(B) You demonstrate compliance with the applicable chloroform limitation or standard by immediately monitoring the bleach plant effluent for chloroform at a frequency similar to that required in paragraph (a) of this section and for a duration determined by the permit or pretreatment control authority.

(ii) In order to continue your exemption from the minimum monitoring requirements of this section for chloroform, you must meet the requirements of paragraph (f)(6)(i) of this section and you must recertify that the fiber line process and operating conditions do not exceed the maximum value recorded under paragraphs (f)(2)(ii) or (f)(3)(ii) of this section for each of the parameters identified in those paragraphs.

(7) *Definitions:*

(i) *Kappa factor*—the ratio of available chlorine (total equivalent chlorine, as percent on oven dry pulp) to the kappa number of the pulp. Kappa number is the lignin content of pulp, as measured by a modified permanganate test corrected to 50 percent consumption of the chemical.

(ii) *Total bleach line chlorine dioxide application rate*—mass of chlorine dioxide applied in all stages of the bleach line per mass of unbleached pulp (i.e., lb/ton or kg/kg).

(iii) *Chlorine-containing compounds*—compounds containing chlorine used in the bleach plant for bleaching, brightening, whitening, or viscosity control. These compounds include but are not limited to chlorine ( $\text{Cl}_2$ ), sodium hypochlorite ( $\text{NaOCl}$ ), chlorine dioxide ( $\text{ClO}_2$ ) and chlorine monoxide ( $\text{Cl}_2\text{O}$ ).

(g) Analyst may use NCASI Method CP-86.07, “Chlorinated Phenolics in Water by *In situ* Acetylation and GC/MS Determination” (January 2002) for determination of certain chlorinated phenols, chlorinated guaiacols, chlorinated catechols, chlorinated benzaldehydes (i.e., vanillins and syringaldehydes), and trichlorsyringol (analytes specified in the method) in bleach plant filtrate as an alternative to EPA Method 1653. NCASI Method CP-86.07 is available from the Publications Coordinator, NCASI, P.O. Box

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[63 FR 18635, Apr. 15, 1998, as amended at 67 FR 58997, Sept. 19, 2002; 72 FR 11248, Mar. 12, 2007]

### **§ 430.03 Best management practices (BMPs) for spent pulping liquor, soap, and turpentine management, spill prevention, and control.**

(a) *Applicability.* This section applies to direct and indirect discharging pulp, paper, and paperboard mills with pulp production in subparts B (Bleached Papergrade Kraft and Soda) and E (Papergrade Sulfite).

(b) *Specialized definitions*—(1) *Action Level:* A daily pollutant loading that when exceeded triggers investigative or corrective action. Mills determine action levels by a statistical analysis of six months of daily measurements collected at the mill. For example, the lower action level may be the 75th percentile of the running seven-day averages (that value exceeded by 25 percent of the running seven-day averages) and the upper action level may be the 90th percentile of the running seven-day averages (that value exceeded by 10 percent of the running seven-day averages).

(2) *Equipment Items in Spent Pulping Liquor, Soap, and Turpentine Service:* Any process vessel, storage tank, pumping system, evaporator, heat exchanger, recovery furnace or boiler, pipeline, valve, fitting, or other device that contains, processes, transports, or comes into contact with spent pulping liquor, soap, or turpentine. Sometimes referred to as “equipment items.”

(3) *Immediate Process Area:* The location at the mill where pulping, screening, knotting, pulp washing, pulping liquor concentration, pulping liquor processing, and chemical recovery facilities are located, generally the battery limits of the aforementioned processes. “Immediate process area” includes spent pulping liquor storage and spill control tanks located at the mill, whether or not they are located in the immediate process area.

(4) *Intentional Diversion:* The planned removal of spent pulping liquor, soap, or turpentine from equipment items in spent pulping liquor, soap, or turpentine service by the mill for any purpose

including, but not limited to, maintenance, grade changes, or process shutdowns.

(5) *Mill:* The owner or operator of a direct or indirect discharging pulp, paper, or paperboard manufacturing facility subject to this section.

(6) *Senior Technical Manager:* The person designated by the mill manager to review the BMP Plan. The senior technical manager shall be the chief engineer at the mill, the manager of pulping and chemical recovery operations, or other such responsible person designated by the mill manager who has knowledge of and responsibility for pulping and chemical recovery operations.

(7) *Soap:* The product of reaction between the alkali in kraft pulping liquor and fatty acid portions of the wood, which precipitate out when water is evaporated from the spent pulping liquor.

(8) *Spent Pulping Liquor:* For kraft and soda mills “spent pulping liquor” means black liquor that is used, generated, stored, or processed at any point in the pulping and chemical recovery processes. For sulfite mills “spent pulping liquor” means any intermediate, final, or used chemical solution that is used, generated, stored, or processed at any point in the sulfite pulping and chemical recovery processes (e.g., ammonium-, calcium-, magnesium-, or sodium-based sulfite liquors).

(9) *Turpentine:* A mixture of terpenes, principally pinene, obtained by the steam distillation of pine gum recovered from the condensation of digester relief gases from the cooking of softwoods by the kraft pulping process. Sometimes referred to as sulfate turpentine.

(c) *Requirement to implement Best Management Practices.* Each mill subject to this section must implement the Best Management Practices (BMPs) specified in paragraphs (c)(1) through (10) of this section. The primary objective of the BMPs is to prevent leaks and spills of spent pulping liquors, soap, and turpentine. The secondary objective is to contain, collect, and recover at the immediate process area, or otherwise control, those leaks, spills, and intentional diversions of spent pulping liquor,